

**ABSTRACT****METHOD AND APPARATUS FOR TRANSMITTING PACKETS WITHIN A  
SYMMETRIC MULTIPROCESSOR SYSTEM**

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An apparatus for transmitting packets within a symmetric multiprocessor system is disclosed. The symmetric multiprocessor system includes multiple processing nodes, with multiple agents at each node, connected to each other via an interconnect. A request transaction is initiated by a master agent in a master node to all receiving nodes. A write counter number is generated for associating with the request transaction. The master agent then waits for a combined response from the receiving nodes. After the receipt of the combined response, a data packet is sent from the master agent to an intended one of the receiving nodes according to the combined response. After the data packet has been sent, the master agent in the master node is ready to send another request transaction along with a new write counter number, without the necessity of waiting for an acknowledgement from the receiving node.

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